

ASSIGNMENT-3

PREPARED BY

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The stocks I chose for my pair trading strategy are Bajaj Finance and Titan. Though they are not two stocks from the same industry, they show very good correlation. While calculating correlation for various stocks, I found correlation between price series of both the stocks to be close to 0.90, and upon further backtesting my strategy on both of these stocks, the returns were good.

The strategy I used to generate buy/sell signals is solely based on the ratio of rsi values of both the stocks. I first calculated rsi values for both the stocks over a 14 day period. Then I calculated the rsi ratio for the two stocks. I set my high threshold 1.2 for going long on the ratio and a low threshold 0.8 for going short. The trading signals I generated were as follows:

- Go Long: If the RSI ratio crosses above the high threshold, it indicates that stock A is relatively stronger than stock B. I considered opening a long position in stock A and a short position in stock B, anticipating that stock A will outperform stock B.
- Go Short: If the RSI ratio crosses below the low threshold, it indicates that stock B is relatively stronger than stock A. I considered opening a short position in stock A and a long position in stock B, expecting stock B to outperform stock A.

Upon backtesting my strategy, the results obtained for chosen pair of stocks were as follows:

TOTAL RETURNS	248.81%
ANNUALISED RETURNS	71.08%
SHARPE RATIO	2.93